

NON-PUBLIC?: N  
ACCESSION #: 8905160098  
LICENSEE EVENT REPORT (LER)

FACILITY NAME: Yankee Nuclear Power Station, Rowe, MA. 01367 PAGE: 1 OF 2

DOCKET NUMBER: 05000029

TITLE: Manual Reactor Trip Due To Personnel Error During Surveillance Testing  
EVENT DATE: 04/06/89 LER #: 89-005-00 REPORT DATE: 05/06/89

OPERATING MODE: 1 POWER LEVEL: 100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR  
SECTION  
50.73(a)(2)(iv)

LICENSEE CONTACT FOR THIS LER:  
NAME: Russell A. Mellor, Technical Director TELEPHONE: (413)424-5261

COMPONENT FAILURE DESCRIPTION:  
CAUSE: A SYSTEM: COMPONENT: MANUFACTURER:  
REPORTABLE TO NPRDS:

SUPPLEMENTAL REPORT EXPECTED: NO

ABSTRACT:

On April 6, 1989 at 1123 hours with the plant at 100% power, the reactor was manually tripped when Number 1 Main Steam Line Isolation Valve (MSLIV) was inadvertently closed during a routine surveillance test of the MSLIV automatic control system. The manual trip was initiated, as required by procedure, to prevent a possible challenge to the Main Steam Line Safety Valves on Number 1 Steam Line. Full closure of the valve occurred when Instrumentation and Control personnel performing the control system functional test missed a procedure step. The missed step requires the insertion and removal of a test plug into a test jack terminal to block a trip signal prior to operating the valve control switch. If this step had been completed prior to operating the control switch, the valve would not have closed. After the plant trip, all plant systems functioned as designed.

The root cause of the event has been attributed to personnel error in that the technician performing the procedure missed a step. Corrective actions included counseling the technicians on the importance of following procedure steps as written, and understanding the expected results of each step prior to its' performance. All special surveillance procedures of this type will be

reviewed for human factors considerations and revised as necessary to improve usability.

This is the first event of this nature. There was no adverse effect on the health and safety of the public as a result of this event.

END OF ABSTRACT

TEXT PAGE 2 OF 2

On April 6, 1989 at 1123 hours with the plant at 100% power, the reactor was manually tripped when Number 1 Main steam Line Isolation valve (MSLIV) was inadvertently closed during a routine surveillance test of the MSLIV automatic control system. The manual trip was initiated as required by procedure, to prevent a possible challenge to the Main Steam Line Safety Valves on Number 1 Steam Line. Full closure of the valve occurred when Instrumentation and Control personnel performing the control system functional test missed a procedure step. The missed step requires the insertion and removal of a test plug into a test jack terminal to block a trip signal prior to operating the valve control switch. If this step had been completed prior to operating the control switch, the valve would not have closed. After the plant trip, all plant systems functioned as designed.

The root cause of the event has been attributed to personnel error in that the technician performing the procedure missed a step. The following problems have been identified as contributing to the error:

Failure to utilize self-checking as a means of error detection.

Failure to follow a written procedure correctly.

Surveillance procedure contained human factor weaknesses.

Corrective actions included counseling the technicians on the importance of following procedure steps as written, and understanding the expected results of each step prior to its' performance. All special surveillance procedures of this type will be reviewed for human factors considerations and revised as necessary to improve usability.

This is the first event in which a technician missed a surveillance procedure step resulting in a need to manually trip the reactor. There was no adverse effect on the health and safety of the public as a result of this event.

ATTACHMENT 1 TO 8905160098 PAGE 1 OF 1

YANKEE ATOMIC ELECTRIC COMPANY Telephone (413) 424-5261

Star Route, Rowe, Massachusetts 01367

TO: NRC - DOCUMENT CONTROL DESK May 5, 1989  
DOCUMENT: LICENSEE EVENT REPORT, LER BYR 89-93  
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U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

Subject: Licensee Event Report No. 50-29/89-05

Manual Reactor Trip Due to Personnel Error During Surveillance  
Testing

Dear Sir:

In accordance with 10 CFR 50.73(a)(2)(iv), the attached Licensee Event Report  
is hereby submitted.

Very truly yours,  
Normand N. St. Laurent  
Plant Superintendent

DAR/pkg  
ENCLOSURE

cc: 3! NSARC Chairman (YAEC)  
1! Institute of Nuclear Power Operations (INPO)  
1! USNRC, Region I  
1! Resident Inspector

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